

EXHIBIT 15

1 UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF VIRGINIA

2 ALEXANDRIA DIVISION

3 - - - - - x

4 UNITED STATES, et al., :

5 Plaintiffs, :

6 v. : Case No.

7 GOOGLE, LLC, : 1:23-cv-00108

8 Defendant. :

9 - - - - - x

Monday, March 4, 2024

Washington, D.C.

10
11 Job No. CS6484199

12 Videotaped Deposition of:

13 WAYNE D. HOYER, Ph.D.,

14 called for oral examination by counsel for the

15 Defendant, pursuant to notice, at the United States

16 Department of Justice, Antitrust Division, 450 Fifth

17 Street, Northwest, Suite 11-248, Washington,

18 D.C. 20001, before Christina S. Hotsko, RPR, CRR, of

19 Veritext Legal Solutions, a Notary Public in and for

20 the District of Columbia, beginning at 8:33 a.m.,

21 when were present on behalf of the respective

22 parties:

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Page 5

<p style="text-align: right;">Page 374</p> <p>1 at 3:28 p.m. 2 (A recess was taken.) 3 VIDEO TECHNICIAN: We're now back on the 4 record at 3:42 p.m. You may proceed. 5 MS. DEARBORN: Thank you. 6 BY MS. DEARBORN: 7 Q. Welcome back, Dr. Hoyer. 8 Okay. When we broke, I had just turned 9 to paragraph 76 in your report. Do you have that 10 in front of you? 11 A. I do. 12 Q. The second sentence in this paragraph 13 says, "When the cost of a display ad tool 14 increases, a key (and perhaps the most common) 15 option for advertisers is to switch to another 16 display ad tool." 17 Do you see that? 18 A. I do. 19 Q. I notice there's no citation in that 20 sentence. 21 What is that statement based on? 22 A. It's based on my opinion. The key thing,</p>	<p style="text-align: right;">Page 376</p> <p>1 Q. And I think I botched my question, so let 2 me ask it again just to get a clean record. 3 What is your basis for believing that 4 switching between display ad tools is more common 5 or less common than switching to a different 6 advertising type? 7 MR. SHEANIN: Objection to form. Asked 8 and answered. 9 THE WITNESS: Yes, as I say, based on my 10 expert opinion, that's not the key aspect of my 11 criticism. My key criticism is that that is a 12 very viable option that is not given in the 13 survey. 14 BY MS. DEARBORN: 15 Q. Okay. I'm so sorry to do this. This is 16 literally just for a clean record. I have to ask 17 this, because you actually gave different answers 18 to the two questions that I asked, and I just 19 asked it to clean up the record. 20 My question is, what is your basis for 21 believing that switching between display ad tools 22 is more common or less common than switching to a</p>
<p style="text-align: right;">Page 375</p> <p>1 whether it's the most common option or not, is 2 that it's not included as an option. And so it is 3 a -- by -- "perhaps the most common" meant just 4 that that's something -- there's different 5 competitors that you might switch to, but that's 6 not an option here. 7 Q. So you say it's -- that the statement is 8 based on your opinion. 9 What is the basis of your opinion? 10 A. Well, based on my knowledge of marketing, 11 that when -- if the cost of one alternative 12 increases, it is also a distinct possibility -- 13 and I say perhaps; I didn't say it is -- that 14 perhaps it could be a very common option to switch 15 to a different programmatic display tool. 16 Q. What is your basis for believing that 17 switching between display ad tools is more common 18 or less common than switching to a different 19 display ad type? 20 A. I have no evidence. I'm simply trying to 21 point out that it is an option, a very viable 22 option that could occur.</p>	<p style="text-align: right;">Page 377</p> <p>1 different advertising type for advertisers? 2 MR. SHEANIN: Objection. Form. Asked 3 and answered. 4 THE WITNESS: And as I said, the key to 5 my opinion or my criticism is not whether or not 6 it's the most common. It's that it is an option 7 and it's a viable option and it's not an option in 8 the survey. 9 BY MS. DEARBORN: 10 Q. But you don't have a basis to say one way 11 or another what options available to advertisers 12 are more common than other options? 13 MR. SHEANIN: Objection. Form. 14 THE WITNESS: I'm not -- again, that's 15 not central to my opinion. That's why it's in 16 parentheses. 17 BY MS. DEARBORN: 18 Q. Okay. I understand it's not central to 19 your -- 20 A. The key option for advertisers to switch 21 to another display tool. 22 Q. I'm just trying to get to the basis for</p>

<p style="text-align: right;">Page 378</p> <p>1 your opinions, Dr. Hoyer, regardless of whether 2 it's central or not. 3 Is it fair to say that you have no basis 4 to say one way or the other what the most common 5 options are for advertisers? 6 MR. SHEANIN: Objection to form. 7 THE WITNESS: Again, most common is not 8 the critical thing. The key thing: It's a viable 9 option, as it says in my response. Whether it's 10 most common or not doesn't matter. The fact that 11 it is a viable option and it's not included makes 12 the question biased. 13 BY MS. DEARBORN: 14 Q. And you haven't done an evaluation one 15 way or the other as to what the most common 16 options are for advertisers in response to an 17 increase in the cost of a display ad tool, right? 18 MR. SHEANIN: Objection to form. 19 THE WITNESS: I mean, anyone that knows 20 anything about advertising could tell you that 21 it's an option that they have. It's common sense. 22 Are you saying they would never switch to another</p>	<p style="text-align: right;">Page 380</p> <p>1 that question. 2 BY MS. DEARBORN: 3 Q. Sure. Well, this is a -- you are 4 claiming that this question is biased because the 5 most common -- or a key option for advertisers is 6 to switch to another display ad tool and not to a 7 different advertising type, right? 8 MR. SHEANIN: Objection. Form. 9 THE WITNESS: Well, as I just said, it's 10 a viable option. So what is your question? 11 BY MS. DEARBORN: 12 Q. Right. 13 Is it your opinion that it would be 14 impossible to test advertisers' diversion to 15 another advertising type because it is also an 16 option for them to switch to another display ad 17 tool? 18 MR. SHEANIN: Objection to form. 19 THE WITNESS: You can do it. He did it, 20 but it's not reliable. It's not what reflects the 21 realistic marketplace condition. 22</p>
<p style="text-align: right;">Page 379</p> <p>1 ad display tool? 2 BY MS. DEARBORN: 3 Q. I'm using your words, Dr. -- 4 A. Yes. 5 Q. -- Hoyer, and I'm attempting to 6 understand the basis for them. That's really all 7 I'm asking. All right? 8 So you haven't done an evaluation one way 9 or another as to what the most common options are 10 in response to an increase in the cost of a 11 display ad tool for advertisers, correct? 12 MR. SHEANIN: Objection to form. And 13 asked and answered. 14 THE WITNESS: I have not, but it doesn't 15 matter in terms of my opinion. 16 BY MS. DEARBORN: 17 Q. Okay. Is it your opinion that it would 18 be impossible to test advertisers' diversion to 19 another advertising type because it is an option 20 for them to switch to another display ad tool? 21 MR. SHEANIN: Objection to form. 22 THE WITNESS: I'm not sure I understand</p>	<p style="text-align: right;">Page 381</p> <p>1 BY MS. DEARBORN: 2 Q. Do you think it's unrealistic for the 3 cost of something to go up? 4 A. I think it's unrealistic for the cost of 5 the entire -- all of programmatic display 6 advertising at the same time, yes, which is what 7 the question states. 8 Q. What other display ad tools are available 9 to advertisers in addition to those provided by 10 Google? 11 A. Well, there's a whole list of them in 12 Simonson's report. 13 You've already asked me that, and I don't 14 remember the names. 15 Q. We've talked about your experience 16 teaching marketing courses over the course of the 17 day, right? 18 A. Yes. 19 Q. Based on what you know, is it possible 20 that a company wanting to advertise its services 21 would use both a banner ad on a website and also 22 an ad on Facebook to advertise their products?</p>

<p style="text-align: right;">Page 382</p> <p>1 MR. SHEANIN: Objection to form.</p> <p>2 THE WITNESS: Sure. That's good</p> <p>3 advertising. You use different tools to reach</p> <p>4 different aspects of your target market.</p> <p>5 BY MS. DEARBORN:</p> <p>6 Q. Based on your experience, is it fairly</p> <p>7 common for advertisers to use multiple advertising</p> <p>8 types to reach their customers?</p> <p>9 A. Yes. But that's not my -- the</p> <p>10 understanding of the case. The case is switching</p> <p>11 between different ad tools, not to other</p> <p>12 advertising types.</p> <p>13 Q. And again, you're -- strike that.</p> <p>14 All right. Looking at paragraph 77 in</p> <p>15 your report.</p> <p>16 So in this paragraph, you question the</p> <p>17 sort of order of Dr. Simonson's questions, right?</p> <p>18 A. Yes.</p> <p>19 Q. Do any of the sources that you cite in</p> <p>20 footnote 133 -- I'm sorry, 143 here state that</p> <p>21 respondents would have been more likely to select</p> <p>22 that they would substantially increase spending</p>	<p style="text-align: right;">Page 384</p> <p>1 of digital advertising they would divert spending</p> <p>2 and then asked them how much they would divert,</p> <p>3 right?</p> <p>4 A. Yes.</p> <p>5 Q. Is it your opinion that Professor</p> <p>6 Simonson should not have asked three questions</p> <p>7 about diversion?</p> <p>8 A. I would have to give thought to that.</p> <p>9 But yes, it's telling them -- it's focusing them</p> <p>10 on spending, which increases their likelihood of</p> <p>11 increasing their spending later on.</p> <p>12 Q. Are you --</p> <p>13 A. Perhaps he could have separated with</p> <p>14 other questions to divert them away from that, but</p> <p>15 I would need to give some thought of how to</p> <p>16 accomplish that.</p> <p>17 Q. Is your issue that three questions is</p> <p>18 just too many?</p> <p>19 A. It's not too many. It's in a row, you</p> <p>20 know, spend, spend, spend. And it primes them, as</p> <p>21 I say, to increase their advertising spending.</p> <p>22 And related to the demand effects, it's cluing me</p>
<p style="text-align: right;">Page 383</p> <p>1 because they were first asked a question about</p> <p>2 whether they would divert spending?</p> <p>3 MR. SHEANIN: Objection. Form.</p> <p>4 Foundation.</p> <p>5 THE WITNESS: The sources are not in the</p> <p>6 context of that specific question, but they talk</p> <p>7 specifically about priming effects, which is</p> <p>8 what's occurring here.</p> <p>9 BY MS. DEARBORN:</p> <p>10 Q. And I believe I know the answer to this</p> <p>11 question, but you didn't conduct a survey that</p> <p>12 would eliminate what you call the priming effects</p> <p>13 of these questions, correct?</p> <p>14 MR. SHEANIN: Objection to form.</p> <p>15 THE WITNESS: As I said, it was not part</p> <p>16 of my assignment, but it would have been incumbent</p> <p>17 upon Simonson to demonstrate that in his survey if</p> <p>18 he had pretested properly.</p> <p>19 BY MS. DEARBORN:</p> <p>20 Q. Okay. Now, you take issue with the fact</p> <p>21 that respondents were first asked if they would</p> <p>22 divert spending and then asked them to which types</p>	<p style="text-align: right;">Page 385</p> <p>1 in: Ah, they want me to increase my spending.</p> <p>2 And so that's -- the demand effect works in there</p> <p>3 as well.</p> <p>4 Q. Are --</p> <p>5 A. That's part of the priming effect.</p> <p>6 Q. Are you suggesting that Professor</p> <p>7 Simonson should have asked about the extent of</p> <p>8 diversion before asking respondents whether they</p> <p>9 would divert?</p> <p>10 MR. SHEANIN: Objection. Form.</p> <p>11 THE WITNESS: No. I'm just saying that</p> <p>12 perhaps he could have -- and again, I would need</p> <p>13 to give this some thought. He could have asked</p> <p>14 questions in between that so that it breaks up the</p> <p>15 sequence of spend, spend, spend.</p> <p>16 BY MS. DEARBORN:</p> <p>17 Q. Earlier in your report you critique</p> <p>18 Dr. Simonson for switching between perspectives,</p> <p>19 right?</p> <p>20 A. Yes.</p> <p>21 Q. Wouldn't asking questions about diverting</p> <p>22 and then switching to a different topic and then</p>

<p style="text-align: right;">Page 386</p> <p>1 switching back to diversion also be confusing or 2 taxing to respondents? 3 MR. SHEANIN: Objection to form. 4 THE WITNESS: The prospective issue is 5 about, is it my unit, is it me, is it my company? 6 This is not -- it's still focused on what you 7 would do here, so it's not changing perspective. 8 BY MS. DEARBORN: 9 Q. So it's taxing to change perspectives in 10 questions but not to change topics? 11 A. Well, every question changes topics in 12 the survey. I'm just saying the sequence here is 13 that it's priming responding, and it's suggesting 14 to them that increasing my spending is important 15 and, therefore, that could have inflated their 16 answers. 17 Q. How would you have designed a survey that 18 asked respondents whether they would do something 19 and then tests how much they would do it -- 20 MR. SHEANIN: Objection to form. 21 BY MS. DEARBORN: 22 Q. -- without priming them?</p>	<p style="text-align: right;">Page 388</p> <p>1 A. I -- not to my -- I can't tell you. 2 There's hundreds of studies I've done. I would 3 hope I did not, but I can't remember. 4 Q. Okay. In paragraph 77(b), you take issue 5 with Professor Simonson's slider in the answer 6 choices for high spend, question 7, and then the 7 corresponding ones in the low spend in the agency 8 survey, right? 9 A. Correct. 10 Q. You take issue with the fact that it 11 starts -- the slider starts with keep the same as 12 zero? 13 A. Yes. Well, two issues. That it starts 14 with zero and it's not the full continuum. They 15 don't -- he doesn't have the ability to decrease. 16 Q. Right. So you think that the zero in 17 that sliding scale should have been labeled 18 decrease? 19 A. No. It -- well, it shouldn't have 20 been -- I'd have to -- there should be a scale 21 that goes from decrease up to increase. In the 22 middle -- it could be a bipolar scale where it's</p>
<p style="text-align: right;">Page 387</p> <p>1 A. As I said -- 2 MR. SHEANIN: Same objection. 3 THE WITNESS: Sorry. 4 You could perhaps break it up and ask a 5 simple question in between. I haven't given it 6 extensive thought, but -- I would need some time 7 to develop that. But I would be concerned about 8 that. 9 And by the way, I believe it also extends 10 to later questions, too. Like I believe question 11 9 is -- 8 and 9 further are along the same lines, 12 if I remember correctly. 13 BY MS. DEARBORN: 14 Q. In your experience as a marketing expert, 15 have you ever seen a survey that asks three 16 questions in a row about a particular topic? 17 A. Yes, I have. And it would be a criticism 18 of my review. That's why we talk about priming in 19 research, because it is an issue. 20 Q. Have you ever conducted a survey that 21 asks three questions in a row about a particular 22 topic, to your knowledge?</p>	<p style="text-align: right;">Page 389</p> <p>1 negative numbers and zero is the middle. But it 2 wouldn't need ten points in that case. 3 Q. In order to get to question 7, 4 respondents had to answer that they would have 5 diverted spending to another advertising type, 6 right? 7 A. Yes. 8 Q. So why would it have made sense to label 9 one end of the slider as decreased if they had 10 already indicated that they would divert spending? 11 A. Because the set of ad tools is a whole 12 set that -- it might be, if you're suddenly not 13 going to use display advertising, you could 14 possibly increase some and decrease others. You 15 could completely re-evaluate your entire set of 16 tools, and it may be some of the other tools you 17 also -- you decide to decrease and increase 18 others, put more emphasis on YouTube ads or -- and 19 then allocate spending less to other tools. 20 It doesn't automatically mean you 21 increase everything that you're going to divert 22 to.</p>

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1 Q. How would you go about determining
2 whether or not different people from the same
3 company or from different business units within
4 the same company took the survey?

5 A. You would need a question or data on
6 that. And in his instructions, he -- it is
7 completely anonymous. And looking back at the
8 backup data, there was no question on what company
9 they were from, so there's no way to evaluate
10 that.

11 MR. SHEANIN: Thank you. I have no
12 further questions.

13 MS. DEARBORN: Nothing further.

14 VIDEO TECHNICIAN: Okay. This now ends
15 the deposition of Dr. Wayne Hoyer. We're off the
16 record at 5:16 p.m.

17 (Whereupon, at 5:16 p.m., the videotaped
18 deposition of WAYNE D. HOYER, Ph.D., was
19 concluded.)
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1 CERTIFICATE OF NOTARY PUBLIC
2 I, CHRISTINA S. HOTSKO, the officer before
3 whom the foregoing deposition was taken, do hereby
4 certify that the witness whose testimony appears in
5 the foregoing deposition was duly sworn by me; that
6 the testimony of said witness was taken by me in
7 stenotypy and thereafter reduced to typewriting under
8 my direction; that said statement is a true record of
9 the proceedings; that I am neither counsel for,
10 related to, nor employed by any of the parties to the
11 action in which this statement was taken; and,
12 further, that I am not a relative or employee of any
13 counsel or attorney employed by the parties hereto,
14 nor financially or otherwise interested in the
15 outcome of this action.

16 Dated: March 6, 2024
17



18 CHRISTINA S. HOTSKO

19 Notary Public in and for the
20 District of Columbia

21 My commission expires:
22 1 January 2027

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